GEOGRAPHIC NEWS BULLETINS

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(The National Geographic Society is a scientific and educational Society, wholly altruistic, incorporated under the Federal law as a non-commercial institution for the increase of geographic knowledge and its popular diffusion. General Headquarters, Washington, D. C.)

Contents for Week of October 26, 1936. Vol. XV. No. 16.

1. Birthday Candles for the Lady of the Torch
2. Spain's Stormy History Recorded in Madrid's Prado Paintings
3. Expedition Finds Relics of Eskimos Who Wore Armor
4. A Safe Haven at Last for the Joshua Tree
5. Asama-yama, Japanese Chimney, Smokes Again

Photograph by Amos Burg

NEW ROOTS OF THEIR FAMILY TREE UNCOVERED

Ancestral origins of these Eskimo belles were investigated by the National Geographic Society-Smithsonian Institution Expedition in Alaska. Their slant eyes are credited by many scientists to early migrations from Mongolia. At Anvik, their home, south of the Expedition's location, the Eskimos are mixing with the Indians, forming a racial combination which probably will interest archeological expeditions a century or two from now (see Bulletin No. 3).

HOW TEACHERS MAY OBTAIN THE BULLETINS

The Geographic News Bulletins are published weekly throughout the school year (thirty issues) and will be mailed to teachers in the United States and its possessions for one year upon receipt of 25 cents (in stamps or money order); in Canada, 50 cents. Entered as second-class matter, January 27, 1922, at the Post Office at Washington, D. C., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized February 9, 1922.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

Birthday Candles for the Lady of the Torch

THE Statue of Liberty will be fifty years old on October 28. On Bedloe Island, in New York harbor, President Roosevelt, Secretary of the Interior Harold L. Ickes, the French Ambassador André de Laboulaye, and a member of the French Chamber of Commerce are expected to join in a patriotic ceremony sponsored by the National Park Service.

This will be broadcast throughout the United States and to France.

The giant figure of "Liberty Enlightening the World" still provides a thrill for home-coming Americans and is a symbol of friendly alliance between nations.

Expresses Franco-American Friendship

Her presentation was an expression of Franco-American friendship, enduring since the American Revolution and strengthened by American kindness to France in the Franco-Prussian War. Commemorating a century of American independence, the statue bears on her left arm a tablet inscribed "July 4, 1776."

The second "coming out" party of this most famous American hostess will duplicate as closely as possible the rites in which President Grover Cleveland formally received her from France on October 28, just fifty years ago.

White-haired spectators may find interesting comparisons in the two ceremonies. When unveiled in 1886, the immense goddess towered, in shining copper, above a harbor still sail-flecked, and she overtopped the highest buildings of New York. Today, her copper figure, covered with a patina of verdigris, looms pale green against the jagged skyline. Though somewhat dwarfed by gigantic ocean liners and by Manhattan towers several times her height, she still remains one of the world's largest statues (see illustration, inside cover).

The famous Colossus of Rhodes could never have looked down on her, since her height from heel to top of torch is more than 151 feet, while he reached less than 110. The goddess has a waist 35 feet thick. An elevator ascends inside the pedestal only to her feet, and to reach her head, almost literally "in the clouds," sightseers must toil up a spiral stair. They can assemble, forty at once, in the huge head to peer out through windows in the spiked crown at boats puffing across the harbor and at Manhattan's pinnacles in the background.

Her Hand Is 16 Feet Long

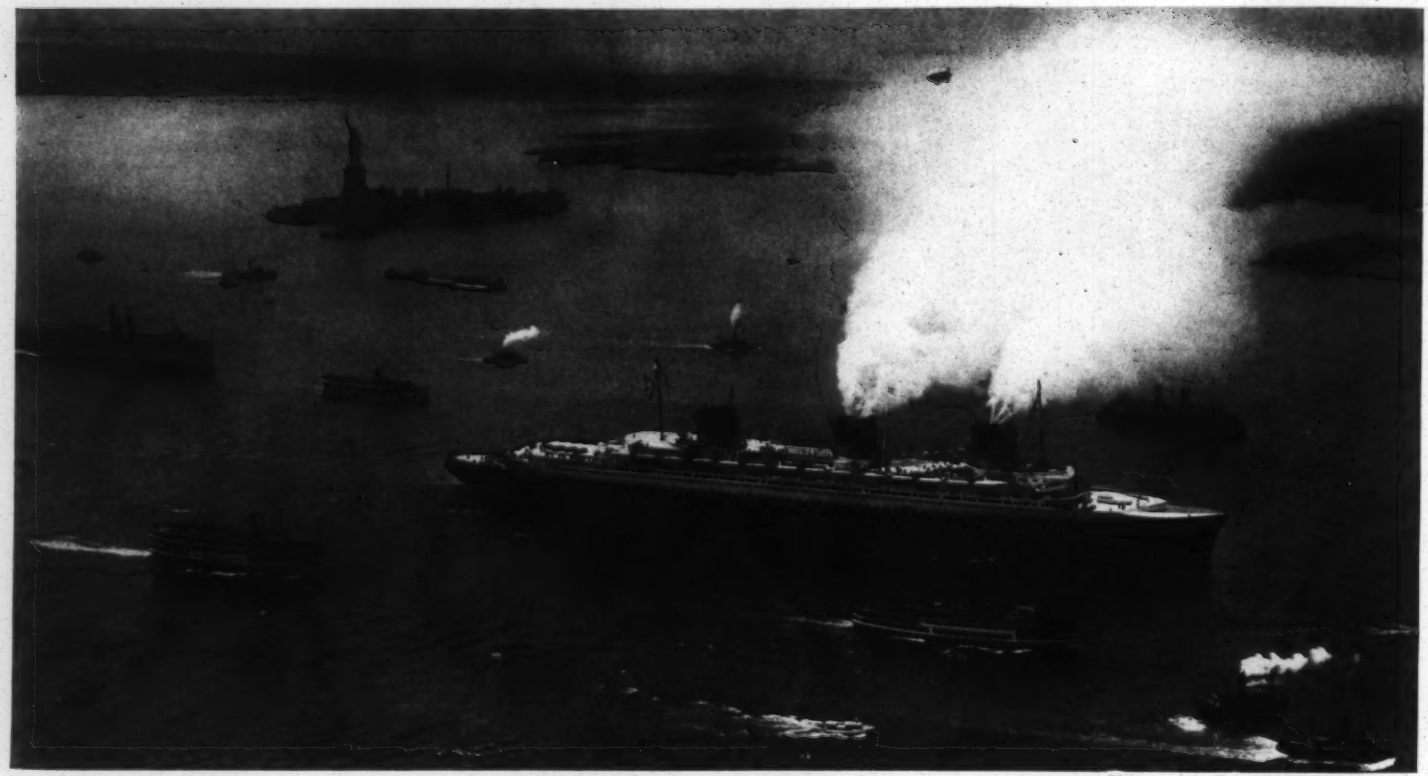
A ladder inside her raised right arm allows privileged climbers to have a still more dizzy view from a gallery in the torch. Correct proportions have given this "little" girl a big hand, 16 feet in length. Imaginative people, weakening in the 42-foot climb up the arm, persevere lest she point at them a finger of scorn, 8 feet long. Foundation, body, and arm elevate the torch 300 feet above the water.

The Statue of Liberty was twelve years in preparation. Its Alsatian sculptor, Frédéric Auguste Bartholdi, made an original 9-foot model in 1874, and worked from enlargements of this. The huge right arm and torch-holding hand were completed in time to awe visitors to the Philadelphia Exposition of 1876.

On July 4, 1884, all Paris was wild with excitement as the entire figure was revealed. It was then dissected into 300 pieces, each weighing from 150 pounds to several tons. Packed in cases in the hold of the French government vessel, *Isère,* and accompanied by American warships, it arrived in New York, June 19, 1885.

Meanwhile the pedestal was slowly rising within the center of star-shaped Fort Wood on Bedloe Island. A structural steel and iron framework, strong enough to withstand hurricane strain, was anchored to the stone pedestal. On it

UMI



Photograph by Fairchild Aerial Surveys

STATUE FROM FRANCE GREETS LINER FROM FRANCE

The S. S. *Normandie* passing the Statue of Liberty gives an interesting opportunity for comparing sizes, which annoys the Liberty Lady less than most other ladies. New York's crowded harbor and skyline can be studied from the base of the Statue of Liberty, then checked with maps, charts, and posters within the statue. It is estimated that New York's "leading lady" will bring 400,000 visitors to her feet before the end of this, her 50th anniversary year (see Bulletin No. 1).

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

Spain's Stormy History Recorded in Madrid's Prado Paintings

MADRID, usually one of Europe's gayest capitals, was for weeks reduced to a tense and cowering state of siege by the efficiency of modern war-horror, both offensive and defensive. In Madrid, the largest population center yet threatened in Spain's civil strife, over a million people were exposed to sudden death by air raids and bombardment.

Also endangered were Madrid's most famous "inhabitants"—painted personages on canvases by Spanish masters. For generations they have inspired admiration. These unofficial diplomatic representatives from Spain have become familiar to foreign stay-at-homes as colored prints and illustrations for art and history books. To many who have never neared Spain, they are no less living than the actual Madrileños of today.

Previous bloodshed and strife is reflected in Madrid's art. A visit to the Prado Museum, where most of the masterpieces have been assembled from collections of a half-dozen spendthrift kings, can be a colorful survey of earlier wars.

Pictures Were Spoils of War

Aside from their historical interest, the pictures in the Prado Museum make it a "gallery of masterpieces." It is said to include less poor painting among its 2,400 works than any other European national museum.

This is the headquarters for Velásquez's tiny tulip-skirted Infantas, the roguish cherubs of Titian, saints suffering beneath El Greco's tempestuous skies, for official portraits of kings with curling mustaches and taffeta sashes over black armor.

The Prado, Madrid's traditional tree-lined promenade through the park, or "Meadow," from which the Museum takes its popular name, has been the scene of fierce fighting (see illustration, next page). The conflict of May, 1808, when Madrid resisted Napoleon's invading army, is depicted in the Prado Museum by sardonic Goya in his "Disasters of War" series. Two pictures reveal revolting scenes of that struggle, notably the midnight execution of peaceful citizens, bewildered and agonized at facing a firing squad in the glare of a large square lantern.

Earlier Spanish victories are recorded in color, such as the battle of Lepanto, by Titian, and the surrender of Breda, in The Netherlands, by Velásquez.

A Meeting-Place for Masterpieces of All Europe

Civil war indirectly gave the Prado Museum some of its finest works by foreign painters. These include "La Perla," a painting of the Holy Family, designated as "the pearl of his Raphaels" by the monarch who acquired it. He bought it from the collection of Charles I of England, after the latter lost his head in England's civil strife.

One picture, Raphael's religious painting of the "Bearing of the Cross," was captured at Palermo, and brought to Spain as a distinguished prisoner in 1661.

Different nationalities represented by the Prado Museum's painters reflect different chapters in the history of Spain's rulers. Belgian Charles V added Spain to his empire and his favorite Flemish art to the collection; the paintings of Brueghel are assembled here to better advantage than even in his native country. French Bourbon kings brought to the Spanish throne a preference for French art; now Watteau's fountainy garden scenes and Poussin's stately heroes are found in Madrid. With Spanish gold plundered from the New World, old Titian's sunset genius was lured to glow over Spain instead of Venice. The Prado Museum has

UMI

were assembled the copper plates that formed the statue. These are three-thirty-seconds of an inch thick.

More than 100,000 contributors from 180 towns in France donated the $700,000 needed to make the immense figure of the goddess. The pedestal, costing $300,000, was paid for by the people of the United States.

Bartholdi, the sculptor, had studied in Egypt, and, perhaps with pyramids and Sphinx in mind, specialized in colossal creations. Of heroic size is his Lion of Belfort in Belfort, France. Noted smaller Bartholdi statues include Lafayette in New York City and figures of Lafayette and Washington in Paris.

Note: Additional views of the Statue of Liberty appear in the following: "New Safeguards for Ships in Fog and Storm," *National Geographic Magazine*, August, 1936; "The Color Camera's First Aerial Success," September, 1930; "On the Trail of the Air Mail," January, 1926; "The Non-Stop Flight Across America," July, 1924.

Bulletin No. 1, October 26, 1936.

Official Photograph, U. S. Army Air Service

"AVE ATQUE VALE" (HAIL AND FAREWELL) HAS BEEN LADY LIBERTY'S MESSAGE TO MILLIONS

She stands on a star, with an army at her feet—or as much of the United States Army as Fort Wood can contain. The wooden barracks (left) have been removed and their sites landscaped. She has a twin in Paris, a smaller bronze "Liberty Enlightening the World" from an island in the Seine, in the grounds of the Paris 1937 Exposition.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

Expedition Finds Relics of Eskimos Who Wore Armor

ESKIMO armor, worn in ancient battles in Alaska 1,000 years ago, and weapons, tools, and household articles that add greatly to knowledge of life in the Far North before the dawn of New World history, have been unearthed by a joint expedition of the National Geographic Society and the Smithsonian Institution.

Preserved for many centuries in the ever frozen Alaskan soil, the relics add new chapters to our knowledge of two early Eskimo cultures, or primitive "civilizations," and fill important gaps in the history of the ancestors of the modern Eskimo.

The remains were excavated during the past summer by the National Geographic Society-Smithsonian Institution Archeological Expedition to the Bering Sea, under the leadership of Henry B. Collins, Jr., of the Smithsonian. Assisting him were James A. Ford, of Louisiana State University, and Harrison Prindle, of Washington, D. C. The expedition has just returned to Washington.

Old "Thule Culture" Spread from Alaska

The armor which the expedition uncovered was made of slats of bone, similar to the slat armor used by some Asiatic tribes. Other finds included harpoon and arrow heads, fish lines of flexible whalebone, fragments of clothing, cooking utensils, combs, awls, needles, ceremonial masks and even toys carved in exact imitation of full-sized boats, animals, etc.

Working at and near Cape Prince of Wales, westernmost point of the North American Continent, the expedition excavated mounds of prehistoric rubbish from villages long since abandoned. One of the mounds was 8 feet deep. Digging was a slow and painful process, because the frozen ground thawed only a few inches each day.

The expedition uncovered the first site of the old Eskimo "Thule culture" ever found in Alaska. "Thule culture" was the stage of development attained by the Eskimos previous to the stage they had reached when found by the first white explorers. It is characterized by certain types of tools, weapons, and art objects.

Thule culture spread all over Arctic North America and even to Greenland. While it has been known to exist in those regions for some time, the new finds confirm the important fact that it spread eastward from Alaska. These proofs were found in a mound located previously by Dr. Diamond Jenness, of the National Museum of Canada, who made the first systematic excavations in Arctic Alaska.

Expedition's Discoveries Link Two Old Civilizations

In the same mound the expedition found evidence that the Thule culture was derived from a still earlier one known as the Birnirk culture, which once flourished in the region of Point Barrow. In successive layers downward in the mound, harpoon heads gradually changed from the Thule style to that of the Birnirk type. Thus we know that the Thule culture grew out of the Birnirk, and the work of the explorers closes a gap that previously existed between them.

Two miles from this location the archeologists found another older mound in which the remains were entirely of the Birnirk type. This was the first discovery of a site of the Birnirk culture outside the Point Barrow region. In other mounds the expedition found remains of more recent times, piecing together a complete picture of Eskimo development in that locality over many centuries.

In addition, Mr. Ford made an archeological survey along the north Alaskan

UMI

no less than forty Titian canvases, the finest collection of his work to be found outside of Italy.

Queen Mary the Bloody, of England, wanted a royal Spanish spouse. Her portrait, sent as an advertisement, hangs near that of her royal but none too ardent husband, Philip II.

To art students the Prado Museum is far more than a vast book of Spain's gloomy history; it is a continuous display of magic tricks. By sleight-of-hand a few pigments are transformed into an airy room or a king galloping to battle. Chief of this craft is Velásquez, most of whose more famous masterpieces are here, about sixty of them.

In the famous portrait of the Infanta Margarita, surrounded by the miniature pomp of her own little court, called "The Maids of Honor," Velásquez permits the bare canvas to show through the painting, and transforms it into silver sheen on a dress. This picture alone, considered one of the finest in all Spanish art, draws throngs to the Prado Museum.

The Museum, originally designed as a natural history museum, is said to owe its artistic career to a capricious king who moved all the royal paintings there to clear the way for redecorating his palaces. Its opening to the public was delayed until 1819 by the conflict with France in the early nineteenth century.

Note: Madrid, before the Revolution, is pictured and described in "Madrid Out-of-Doors," *National Geographic Magazine*, August, 1931. Other descriptions and illustrations of this famous art center, including the Prado Museum, are to be found in the following: "Turbulent Spain," October, 1936; "A Palette from Spain," March, 1936; "Pursuing Spanish Bypaths Northwest of Madrid," January, 1931; "On the Bypaths of Spain," March, 1929; and "Adventurous Sons of Cádiz," August, 1924.

See also in the GEOGRAPHIC NEWS BULLETINS: "New Skyscrapers Pierce Madrid's Skyline," week of April 24, 1933.

Bulletin No. 2, October 26, 1936.

Photograph from Publishers Photo Service

THE PRADO MUSEUM HOUSES ARTS OF PEACE AND SCENES OF WAR

Statuary in niches between the lofty windows, and figures of the painters Goya and Velásquez at the main entrances, are outward evidences of the arts within. The Paseo del Prado, famous promenade which passes and names the Museum, has been for three centuries the pathway of flirtation and revolution.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

A Safe Haven at Last for the Joshua Tree

A LILY that grows to be a tree! A tree that grows only in American deserts! Such is the rare Joshua Tree. This believe-it-or-not shrub now has a home of its own and may escape the fate of much United States wild growth: "rare, rarer, extinct."

It has been given a haven where it can live happily ever afterward, under the protection of the National Park Service, and hereafter will be officially at home to all visitors at the newly created Joshua Tree National Monument in California.

In San Bernardino and Riverside Counties, south of the Mojave Desert, 825,430 acres of primitive desert have been set aside for conservation and named in honor of these shaggy green trees. The barren Little San Bernardino Mountains and the Colorado River Aqueduct are the southern boundaries, just above the popular resort, Palm Springs, in Coachella Valley. Rocky *mesas* in the mountains are favorite stands for the Joshua Tree, which refuses to grow in the baking Pinto Basin below.

Points to Promised Land—and Everywhere Else

Rising from the low fuzz of sage-green mesquite, Joshua Trees are the tallest growth to be seen in the desert. A single tree is equivalent to a whole colony of porcupines, for it bears clusters of long bladelike leaves ending in rigid points.

Mormons gave the tree its Biblical name because it pointed the way to their Promised Land. Less wander-weary travelers of today, however, have observed that it also points in every other direction, including up and down. The picturesque folk name has survived, nevertheless, since this grotesque growth almost requires a stranger label than "tree yucca," or *Yucca brevifolia.*

"Praying tree" is another nickname for this devout shrub, because its many forked branches weirdly resemble arms flung heavenward in prayer.

The Joshua Tree's trunk, a foot or two in diameter, is a single column as far as, or slightly above, the normal height of man. Then it bursts suddenly into clusters of branches, each branch dividing and each division subdividing, expanding into a globular tangle of forks from 10 to 40 feet high. The tallest on record, over 60 feet, was demolished by vandals. Unmolested, it may reach an age of a century or two.

"Praying Tree" Is Populous with Wild Life of Desert

Like other species of the yucca, it is a desert-blooming lily, as its spring flowers betray. No doubt doing the best it can under the circumstances, the Joshua Tree blossom still has no lilylike charm. It is whitish, but not white, with fragrance reminiscent of the toadstool.

Dead leaves, like broken bayonets, form a protective thatch clinging to trunk and branches. The little wood rat is said to tug these discarded weapons to the mouth of his hole to build a spiked barricade against intruders.

The Joshua Tree's formidable arsenal does not frighten off the sly little wild things with which the "lifeless" desert teems. Humming birds, so numerous in the same southwestern desert areas, flutter over its blossoms. Scott's oriole accounts for many a dash of yellow on the gray-green Joshua, where the cup-shaped fiber nest is hung among the tree's protective spikes.

Resourceful Indians formerly turned the undomestic Joshua to domestic use.

UMI

coast, between Kotzebue and Point Barrow, northernmost settlement under the American flag. This trip of almost four hundred miles was made in the large walrus-hide Eskimo boats, or *umiaks,* which are 25 to 30 feet long and can carry as much as three tons of cargo (see illustration, below). Relics dug up by the expedition show that these boats are little different from those used 1,000 years ago by the Eskimos. Modern ones, however, may be powered by outboard motors, clamped to the driftwood frame.

Siberia Only 56 Miles Away

Cape Prince of Wales, the expedition's headquarters, extends to within 56 miles of Siberia. It is a strategic point for digging up relics because it was on the "highroad" of the ancient Eskimos back and forth between Siberia and Alaska. Many scientists are convinced that North America originally was peopled by migrations over this route from Asia.

The expedition made a careful, but unsuccessful, search for remains of pre-Eskimo people, who probably used this same migration route and drifted south, it is thought, to become ancestors of the American Indian.

Note: Additional illustrated material about Alaska can be found in the following: "Exploring Yukon's Glacial Stronghold," *National Geographic Magazine,* June, 1936; "Conquest of Mt. Crillon," March, 1935; "*Nakwasina* Goes North," June, 1933; "World Inside a Mountain," September, 1931; "Today on 'The Yukon Trail of 1898,'" July, 1930; "Mapping the Home of the Great Brown Bear," January, 1929; "Northern Crusoe's Island," September, 1923; "First Alaskan Air Expedition," May, 1922; "Our Greatest National Monument," September, 1921; and "Game Country Without Rival in America," January, 1917.

The Society's Map of the Arctic Regions shows the region explored by this expedition. Copies of the map will be sent postpaid to the United States and its possessions at 50 cents (paper) and 75 cents (linen).

Bulletin No. 3, October 26, 1936.

Photograph by Maynard Owen Williams

IN ALASKA, SAILS AND OARS ARE NOW SOMETIMES REPLACED WITH OUTBOARD MOTORS

These Greenland Eskimos ride in the same type of sealskin or walrus skin *umiak* that has been in use among the natives of the Arctic regions for a thousand years. The *umiak* is considered a woman's boat, or a utility vessel for hauling heavy cargo. Eskimo men generally use the tiny *kayak* for hunting, or for social calls when steamers approach the shore villages.

GEOGRAPHIC NEWS BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

Asama-yama, Japanese Chimney, Smokes Again

ASAMA-YAMA, the Japanese volcano which recently showered ashes for 50 miles over the Nippon countryside, is the largest of Nature's boiling pots on Japan's main island and has the evil reputation of being the most treacherous.

The natives living near the famous volcano think little of its restlessness unless hot rocks, instead of the usual ashes, pour like rain over the neighborhood. A rain of ashes simply brings out umbrellas.

Last July, when the volcano loosed a heavy barrage of ash, the American Ambassador, while visiting a nearby town, became one of the legion of umbrella carriers.

Higher Than Vesuvius

Asama-yama is situated about 100 miles northwest of Tokyo and rises 8,260 feet above sea level. It is nearly a mile higher than Italy's volatile Vesuvius. It is one of the most easily accessible of Nippon's active earthly vents. The rim of its symmetrical cone is visited by thousands of curious sightseers annually.

But the legend has grown that the volcano dislikes peering eyes. For hours, say believers of the tale, the seething crater will remain quiet when there is no one on the rim; then, when a guide arrives with a group of visitors, the boiling pit sputters and explodes, showering out hot rocks and ashes that not infrequently cause fatalities or injuries among the onlookers. Tons of earth are often blown heavenward with every sharp explosion.

Until recent years trails to the crater rim were closed in winter and thrown open in the spring. In May, 1911, one day after the official opening, a large group of visitors climbed the mountain. As the group gazed into the boiling caldron, a violent explosion took place. Many of the sightseers were killed or wounded. In August, 1912, another party of visitors was similarly greeted as it reached the crater rim.

Quiet for 125 Years Until 1908

The present activity of Asama-yama dates from May, 1908. For 125 years before that time the volcano was comparatively quiet. Now Tokyo and Yokohama respect this part of Vulcan's kingdom, for both of these cities shake when Asama-yama breaks into activity.

A recent major eruption was in December, 1912, when lava and hot rocks spouted from the crater and rolled down the mountainside, and dense clouds of ash-laden smoke hung over the surrounding area (see illustration, next page).

Probably the worst eruption of the volcano was in 1783. For nearly three months one terrific explosion after another spread terror and devastation for miles around.

A gigantic lava stream completely destroyed one of Japan's finest primeval forests, leveled forty-eight villages, and killed thousands of natives and countless domestic animals.

Crater Growing Shallower

Many of those who survived the duration of the eruption died of starvation, for large areas of agricultural lands were covered with several feet of rocks and ashes, and no crops could be raised for some time.

It is a day's trip to climb to the rim of Asama-yama and return. There are no dizzy cliffs, but loose volcanic stone and ash often make the going difficult. The

UMI

Its seeds were pounded to meal for Indian mush. Fibers from leaves were woven into baskets, ropes, hats, and even horse blankets.

Desert homesteaders who tried to build Joshua log cabins found themselves provided with all too collapsible homes. The pulp, however, made paper. Several issues of newspapers in the United States and England were even printed on it as an experiment.

Its "Life-Saver" Is A Tiny Moth

The lightweight layers of wood which can be sawed from the tree make excellent protective tubes around the bases of young fruit trees. Because the wooden sheets are pliable in one direction and rigid in the other, they have value as surgical splints to protect broken bones. Rarity of the Joshua Tree, however, prevents extensive industrial use.

Groves are known only in half a hundred spots of southwestern United States. They mysteriously depend for perpetuation on the yucca moth, a special species of which is the only means of pollination. The moth unwittingly performs its duty by the Joshua Tree when gathering a ball of pollen to plug up the hole in which its eggs are laid.

"Stop, look, and leave 'em" is the attitude which Joshua Trees enforce upon the observer. In addition to their natural protection of inaccessibility and rigid spike leaves, they are now guarded by law, which makes it illegal to harm one in any way.

Note: A color picture (Plate VI) showing Joshua trees in the desert in Antelope Valley is included in the article "California, Our Lady of Flowers," *National Geographic Magazine*, June, 1929. See also "Southern California at Work," November, 1934; and "Blackbirds and Orioles," July, 1934.

Bulletin No. 4, October 26, 1936.

Photograph by J. F. Gandara

DENIZENS OF THE DESERT NEED TO BE GROTESQUE

Yuccas, of which the Joshua Tree is the tallest, have made themselves at home in the desert by adopting strange forms. Trunks have been thickened for water storage, leaves narrowed to prevent water evaporation, and bayonetlike points grown to protect stored moisture from theft by thirsty animals. It is difficult to recognize these ugly shrubs as members of the lily family, until blooms on the projecting stalks assert the kinship.

Photograph by Dr. F. Omori

ASAMA OFTEN GOES UP IN SMOKE

This central Honshu volcano's smoke screen screens nothing, but advertises its activity. It is one of the most continuously active of Japan's fiery family of 200 volcanoes, 50 of which are regarded as active.

crater is about one-third of a mile in diameter and about 600 feet deep.

Scientists aver that the crater is filling at the rate of from 12 to 15 feet a year and that at this rate, in the next twenty years, an eruption somewhat similar to that of 1783 may occur, because the shallower the crater, the more violent the eruptions.

Small Grapes Grown

Lower slopes of the mountain produce quantities of small grapes. As the dome of the summit is approached, however, the landscape is covered with wavelike ridges of grayish-black rock, scattered with sand and clinkers. Small rocks at the top may be still warm from a recent eruption.

Clear weather permits the Asama-yama climbers to see Japan's foremost mountain, Fuji-yama, lifting its regular cone far to the south. Similarity in their names comes from repetition of "yama," Japanese for "mountain."

Note: Some other articles about Japan are "Friendly Journeys in Japan," *National Geographic Magazine*, April, 1936; "Japan, Child of the World's Old Age" and "Motor Trails in Japan," March, 1933; "Tokyo To-day," February, 1932; "Sakurajima, Japan's Greatest Volcanic Eruption," April, 1924; "Empire of the Risen Sun," October, 1923; "Some Aspects of Rural Japan," September, 1922; and "Geography of Japan," July, 1921.

Activities of volcanoes in other countries are described in "Guatemala Interlude," *National Geographic Magazine*, October, 1936; "Living on a Volcano" (Niuafoō), July, 1935; "World Inside a Mountain" (Alaska), September, 1931.